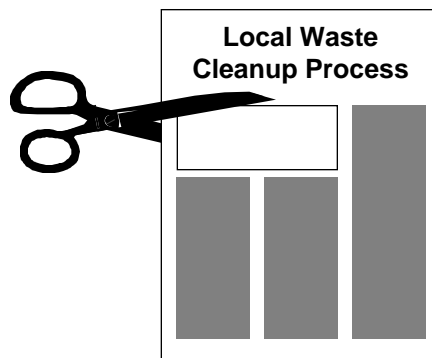


Warm-Up 5

Hazardous Waste Issues in the News



Duration	1 1/4 class period
Grade Level	7-12
Key Terms/ Concepts	Contamination Hazardous waste
Suggested Subjects	Chemistry Geography History Life Science Physical Science Social Studies Journalism

Purpose

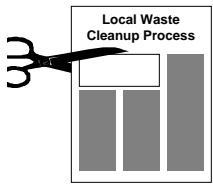
In this exercise, students conduct research to collect reports in newspapers or on TV or the radio on local and national hazardous waste issues. This helps students appreciate the magnitude of the hazardous waste problem. A follow-up discussion allows students to explore how hazardous waste issues affect their community.

Background

The news media—newspapers, news magazines, television and radio stations—informs people about environmental issues and problems. News reports can play an important role in shaping the public's perceptions of the government's efforts to address the issues and resolve the problems. For example, the media not only reports on environment-related events, such as accidents involving the release of hazardous materials or the discovery of hazardous waste **contamination** at a site; it also lets people know how officials are responding and, if necessary, what to do to protect themselves from the hazards involved. The media also helps to keep people informed about the day-to-day progress of **hazardous waste** cleanup efforts, recycling programs, and efforts to conserve natural resources.

The way reports are written can give a good or bad impression of what is being done to remedy hazardous situations. The media can also help communities focus on potentially dangerous situations so prevention measures can be taken before the site becomes truly hazardous.

For additional information on the role the media plays in environmental protection and cleanup, see the Suggested Reading list found at the end of the Haz-Ed materials. Other Haz-Ed materials that are related to this topic include *Fact Flash 10: Superfund Community Involvement Program*.



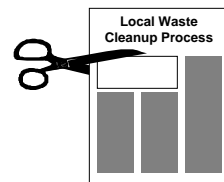
Preparation

1. Gather the following materials:
 - Copies for each student of the following Student Handouts, which present sample articles.

Procedure

Class #1

1. Discuss the role of the media in relationship to Superfund. The media is how most people learn about hazardous waste issues.
2. Explain to students that a follow-up class (specify the date) will focus on the problem of hazardous waste. To prepare for the class, they are to gather reports from the news media (newspapers, magazines, radio, and television) about hazardous waste sites and other environmental contamination problems. Distribute the attached Student Handouts, which can serve as examples of the kinds of stories to look for.
3. Divide the students into 6 teams. Assign each team one of the following:
 - a. Collect articles from local newspapers
 - b. Collect articles from national newspapers (*New York Times*, *Washington Post*, *Los Angeles Times*) or from major daily newspapers in your state
 - c. Collect articles from national news magazines (*Newsweek*, *Time*, *U.S. News and World Report*) or environment-related magazines (*Ecology*, *Audubon*, *Science*)
 - d. Monitor and take notes on radio programs (all-news stations, National Public Radio, and local radio “public affairs” programs)
 - e. Monitor and take notes on television news programs—daily local news, daily national (network) news, CNN, weekly news programs such as *60 Minutes* (CBS), *Dateline* (NBC), *Prime Time Live* (ABC)
 - f. Gather information from the local library on hazardous waste problems and toxic contamination of soil and water since 1980. (*This information should include, but not be limited to, reports on Love Canal near Niagara Falls, New*



York; Times Beach, Missouri; and the 1980 explosion and fire at the Chemical Control Company in Elizabeth, New Jersey. The problems in these communities are referenced in many books about hazardous waste and pollution—see Suggested Reading list.)

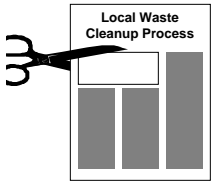
4. Stress that teams with assignments a-e should focus on collecting information about hazardous waste problems in their local area or their state; articles about those in other parts of the country should be gathered only if no local-interest stories are available. They should gather information on the kind of waste, type of incident, location of incident, and people responsible.
5. Allow each team to organize itself and make individual assignments to avoid duplication of effort and complete the research needed. Suggest that each team select a spokesperson to present a brief summary of the information collected by the team at the beginning of the follow-up class.
6. Give teams 3 weeks to conduct research.

Class #2

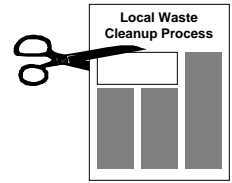
1. Have team members sit together for this class. Have the spokesperson for each team summarize the information the team has collected. Following the presentations, have the class discuss the information presented. Encourage students to compare various hazardous waste issues and problems highlighted in the presentations, what caused them, how they were discovered, and how they are being (or were) addressed.
2. Ask students what conclusions they can draw from this information about how hazardous waste might affect their community. Have them suggest ways they can prevent or minimize the potential problems related to hazardous waste.

Extensions (Optional)

- Have the students write an article or an editorial for your school or community newspaper or a local radio or television station highlighting hazardous waste issues in your community (or state). Have them research how to prepare the material for submission, who to send it to, and how to follow-up to ensure the best chance of publication or broadcast. Have students share their articles and editorials with the class. Encourage one or more students to pursue publication or broadcast of their material and to share the results with the class.



- Have students make a collage of articles they collect and display it on a school bulletin board or use it as the backdrop for a presentation on hazardous waste issues to a school assembly.
- Have students set up an information booth in the school on Earth Day or another environmental event. They can collect and distribute the information they gathered for this assignment and inform other students of hazardous waste sites in the area.



Tank Farm Pollution May Originate from Up to 7 points, Officials Say

By Mike Ward

As many as seven plumes of contamination may be responsible for the underground pollution around East Austin's gasoline tank farm, Texas Water Commission officials said Friday.

At least two of the plumes, they said, may be caused by leaking underground fuel tanks not associated with the tank farm.

"We think we have the plumes pretty well defined now, and we are pressing ahead to clean up the soil and water contamination," said Ken Ramirez, the commission's deputy director.

Agency specialists said they are not planning to require the removal of the contaminated soils as part of that cleanup.

"We haven't ruled it out, but we haven't ruled it in, either," said David Ruckman, who is overseeing the cleanup for the agency. "You'd be talking about a major project to remove soil, and we'd like to avoid that if possible. Plus, what you'd be doing is picking up the contaminated soil one place and moving it to another place."

Ruckman said a string of test wells around the six fuel terminals, which are on a 52-acre site at Springdale Road and Airport Boulevard, show one plume of tainted groundwater beneath the Chevron site.

That plume, likely resulting from a 1987 spill of more than 12,500 gallons of gasoline, apparently has seeped beneath the neighboring Exxon terminal, he said.

A second plume apparently lies under the adjacent Mobil and Star Enterprise terminals, just to the south, according to Ruckman. He said Star may have a separate

contamination plume on another portion of its property and is running additional tests.

A fourth plume, he said, emanates from the Coastal States terminal on Jain Lane. And a fifth plume extends from the site of a 1988 pipeline break at the edge of the neighboring Citgo terminal.

Groundwater contamination has also been found beneath a Kraft Foods plant, across Airport Boulevard from the Star Enterprise terminal, according to Water Commission officials. That apparently resulted from a leaking underground tank and is to be cleaned up, they said.

"There may be another plume beneath the area of Airport and Bolm (Road), but at this point we're not sure whether it's coming from Citgo" or a Payless gas station-convenience store at that intersection, he said.

When the controversy over underground pollution at the fuel terminals began five months ago, officials speculated that contamination resulted from two and possibly three plumes. Additional test wells and monitoring work by experts led to the additional details, Ramirez said.

Ruckman and Robin Shaver with Water Commission's underground storage tank unit said several of the six oil companies that operate the fuel terminals are being asked to drill additional test wells to provide a better definition of the plumes. Most of that work will take place south of the Coastal and Citgo terminals, they said.

"We're at the point where we think we've got a good handle on where the plumes are and where we don't need to do a lot more tests as an agency," Ruckman said. "We're now getting the oil companies to

take the ball on this—get things cleaned up."

As part of the cleanup, several oil companies have proposed pumping out contaminated groundwater and cleansing it of gasoline contaminants that have seeped underground. But removal of contaminated soil, sought by neighborhood residents to prevent recontamination, is not among those plans at present, officials said.

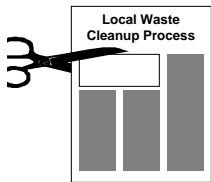
"We have not established any exposure risk to humans" from leaving the tainted soil in place, Shaver said. "It's 20 feet below the surface. There shouldn't be any danger."

Nonetheless, Ramirez and Ruckman said soil removal—which would make a cleanup much more expensive and could force relocation of some residents—has not been ruled out as an option. Ramirez said monitoring wells could be used to check any future pollution, once groundwater steps are complete.

Neighborhood leaders said they want the soil cleaned up.

"The oil companies must clean up what they messed up," said Ron Davis, who heads the East Austin Strategy Team, a coalition of community groups. "They need to clean it up at their expense. And if the Water Commission does not want to execute the will of the people, they should step aside."

American-Statesman, June 27, 1992, Austin, Texas



3 Firms Ante Up Share of the Bill To Cleanse Toxic Site in Newark

By Bill Ganno

Three companies have agreed to pay part of the Federal government's \$22 million cleanup of the White Chemical Corp. Superfund site in Newark, the Environmental Protection Agency (EPA) announced yesterday.

According to the terms of a Superfund unilateral order issued by the EPA late last month, Monsanto Co., Inc., PPG Industries, Inc. and Rhone Poulenc AG Co. have agreed to share in the costs of the cleanup.

But the owner of the 4.4 acre site, the bankrupt operator of the plant and five hazardous waste generators have all refused to help pay for the cleanup and may be targets for future legal action, EPA officials noted.

The company manufactured acid chlorides and flame retardant compounds used by agricultural, pharmaceutical and building products industries at its Frelinghuysen Avenue plant.

The EPA took control of the site in August 1990, several months after a raid on the plant by State investigators from the Attorney General's Office and the Department of Environmental Protection and Energy (DEPE).

At the time of the raid, shocked DEPE investigators found more than 11,000 drums of hazardous materials strewn around the property. Also found were thousands of deteriorating laboratory containers, gas cylinders and improperly stored chemicals.

The conditions at the facility were so dangerous that the Agency for Toxic Substances and Disease Registry warned that the site and the cleanup process could create hazards such as vapor releases, fires, or even explosions.

The site, officials said at the time of the raid, posed a serious health risk to the neighborhood of some 12,000 residents who live within a half mile of the plant.

Located less than a mile from Weequahic Park, Newark International

Airport, the Anheuser-Busch brewery as well as several manufacturing facilities and hotels, office buildings and businesses along nearby busy Routes 1 and 9, members of the Newark and Elizabeth city council say the site has been an environmental nightmare waiting to happen.

DEPE inspectors found that White's improper management of stored toxic and hazardous material had resulted in numerous open containers, frequent releases of hazardous chemicals, damaged, bulging, unlabeled containers, numerous spills and incompatible materials being improperly stored together.

The site was proposed for inclusion on the Superfund national priorities list in a special update in May 1990 and finalized on Sept. 25, 1991. Superfund is the Federal program to clean up abandoned or inactive hazardous waste sites.

So far, the Federal agency has spent more than \$10.5 million on the removal of thousands of drums and other containers of hazardous materials from the White property. Before EPA took control of the site, DEPE spent more than \$825,000 in cleanup costs.

The EPA has inventoried and sampled approximately 7-900 drums and 110 tank vessels as well as categorized and separated over 12,500 lab containers, officials said yesterday.

Of the 11,600 drums found on site, 4,000 empty containers were cleaned and sent away for recycling. EPA has also recycled 48,000 pounds of solid materials and 36,000 gallons of liquid materials.

More than 50 gas cylinders have been returned to the original manufacturers while some 60,000 gallons of liquid wastes, including acids from 1,700 drums, have been drained and stored in tanks on site.

"To date, as a result of regional enforcement efforts, private parties

have contributed approximately \$500 million in Superfund settlements in New Jersey," EPA Administrator William Reilly said in a prepared statement issued by the agency.

"The Superfund emergency removal program used fast-track hazardous waste cleanup methods to stabilize the White Chemical site," Reilly said.

White Chemical moved to Newark in 1983, leaving behind another polluted tract in Bayonne. DEPE had cited the company in 1979 for violations, including unlawful storage of hazardous waste.

The Bayonne site is now also under consideration for possible inclusion on the Superfund list, according to State environmental prosecutor, Assistant Attorney General Steven Madonna.

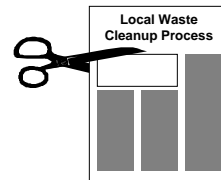
Madonna initiated a probe of the plant that led to the indictment of the firm and its owner, James White, by a grand jury.

In a May 7 plea bargain agreement with Madonna's office, White, 68, pleaded guilty in Superior Court in Newark to two counts of the five count indictment, admitting he illegally stored and disposed of more than 2,000 drums of dangerous chemicals at his plant.

As part of the plea, the State will recommend White serve at least 364 days in jail, serve five years probation and be sentenced to 2,000 hours of community service upon his release from jail.

The conviction on the two counts of unlawful storage and disposal are both third-degree crimes and carry potential sentences of between three and five years and a fine of up to \$7,500. Sentencing before Superior Court Judge Richard Newman in Newark is scheduled for June 22.

**Star-Ledger, June 5, 1992,
Newark, New Jersey**



“Super” News

Saegertown Superfund Site Cleanup Gets a “Cleaner” Plan

By Judy Acker

Changes have been approved for proposed cleanup of the Saegertown Superfund site, eliminating the need for on-site incineration of toxic soil.

Both the Environmental Protection Agency and GATX Corp., former owners of the industrial area, have OK'd a new, cheaper cleanup plan which could save GATX as much as \$7 million and cut down on dust and smoke generated by the incineration process.

The 100-acre area, on the southeast side of Saegertown along Route 198, was the site of a former GATX repair facility for railroad tank cars, in operation from 1951 to 1967.

EPA placed the site on the Superfund cleanup list in 1990 after finding soil and groundwater were contaminated by toxic waste products.

GATX, now headquartered in Chicago, is a management business for acid-based transportation. The firm leases railroad tank cars and offers full service including repair and maintenance of the cars.

Caren Arnstein of ENSR Consulting and Engineering—contracted by GATX to design and oversee the on-site cleanup operation—said GATX submitted a formal request to EPA on Jan. 9 to modify the cleanup plans.

Originally, cleanup was to be done by a mobile incinerator. GATX now has asked EPA to allow for off-site treatment.

The plan provides GATX would excavate the contaminated soils and

materials and ship them to existing facilities for treatment. Soil contaminated by heavy tars would be shipped to Wampum, south of New Castle, and other contaminated soils would be sent to either Kansas or South Carolina to be detoxified.

GATX said the alternative plan would be faster, less expensive and just as safe as on-site incineration. In addition, the plan provides a use for the materials excavated at the site through energy recovery and materials recycling.

EPA will prepare an “Explanation of Significant Difference” required as part of the Superfund process. The new proposal is expected to meet no resistance from Superfund officials.

GATX has retained ENSR and other experienced environmental contractors to conduct excavation and cleanup.

“This change will benefit the Saegertown community because it will eliminate the need for an on-site incinerator, and will result in faster completion of on-site activities,” said Jay Grove, GATX senior environmental engineer.

“We share the borough’s concerns about remediating the site as quickly and as safely as possible, so the land may be developed for productive use,” he said.

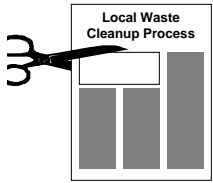
Grove said the new plan is as safe or safer than the previous one for the residents of Saegertown, because it complies with all State and Federal regulations and won’t require new permits.

Steve Donohue of EPA said the proposal is justifiable for several reasons: it’s faster, the waste will be treated as effectively with resource conservation now possible, and cost would be reduced to half of the estimated \$14 million proposed in the original plan.

With the new plan, the estimated completion date for remediation is February 1996.

Donohue will be available for a public question and answer session Feb. 21 from 7 to 9 p.m. at the Saegertown Borough Building.

***Tribune, June 27, 1995,
Meadville, Pennsylvania***



Cleanup Set For Toxic Site

By Arnold Abrams

It looks like another empty lot in a scraggly industrial area, unappetizing but harmless. Lurking unseen beneath the ground on the half-acre site in Garden City, however, are chemical solvents and petroleum products that have seeped into the dirt and threaten to contaminate public drinking water.

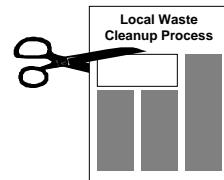
That much was determined more than a decade ago by Nassau County and Hempstead Town authorities, who ran a series of tests and then filed formal complaints against the Pasley Solvents and Chemicals Co., which had used the site as a chemical distribution facility since 1969.

Pasley declared bankruptcy soon after the county and State acted, but nothing was done to the site. By June 1986, it had been designated as one of Long Island's worst hazardous waste sites. It also had been placed on the Federal Environmental Protection Agency's national list of Superfund sites requiring remedial action.

Such action now is about to begin at the Pasley site.

News about the project came last month, when EPA officials announced that approximately \$14 million will be spent to remove waste and eliminate hazards at the site.

***Newsday*, June 15, 1992,
Garden City, New York**



EPA To Begin Glen Ridge Cleanup; W. Orange Radium Work Continues

By Caryl R. Lucas

The U.S. Environmental Protection Agency (EPA) this week will make way for the excavation of radium-contaminated soil from seven homes in Glen Ridge, as a cleanup project moves forward in West Orange.

Pat Seppi, an EPA spokeswoman, said yesterday the Federal agency was able to move up its Superfund cleanup project in Glen Ridge because excavation of radium-contaminated soil from 15 homes in West Orange is going well.

Project coordinator Romona Pezzelli said the agency had been scheduled to begin the cleanup at the seven homes on Carteret Street in the fall. The cleanup also will include a contaminated section of Carteret Park, where the EPA has set up trailers on a portion of the playground.

"In West Orange, eight homes have been completed," said Seppi. In February, the agency began excavating tainted soil from properties on James Court and Alan and Maple streets in West Orange following completion of the cleanup project at 15 Montclair homes.

Seppi said two of the six West Orange families who were relocated have moved back. She anticipates all of the homes there will be restored within four months.

As part of EPA's plan to have work going on in all three communities concurrently, Seppi said the agency began its preliminary work and surveys in Glen Ridge last month.

"We expect to start driving the sheet piling this week and begin other aspects of construction," she said.

Last week, one of the Glen Ridge families whose property will be remediated was relocated temporarily, Seppi said. Two other families are expected to be relocated this week, while the remaining families will be moved by the first week of July.

Saying the majority of the Glen Ridge Properties are among the most severely contaminated homes, Seppi said the cleanup project will take up to six months.

Under a 10-year, \$250 million Superfund project, the EPA will remove tainted soil from 160 properties in the three Essex County towns. In

all, the Federal government discovered contaminated soil on 747 properties designated Superfund sites in Essex County.

Glen Ridge Mayor Carolyn Bourne praised the EPA officials for their cooperation on the remediation plans.

"I am pleased at this point," she said. "Things are going right on schedule."

At the request of borough officials, Bourne said the EPA reduced the amount of space it is using for its trailers and work compound. She also commended the EPA for purchasing new equipment for the park's playground.

***Star-Ledger, June 16, 1992,
Newark, New Jersey***

